

Before the
Federal Communications Commission
Washington, D.C.

In the Matter of)	RM-10786
Petition For Rule Making)	
Amendment of Part 97 of FCC Amateur Service)	
Rules to Eliminate Morse Code Testing)	

Comments of James P. Miccolis, N2EY

Introduction

I am submitting these comments in response to RM-10786, to oppose the proposed removal of Morse code license testing in the Amateur Radio Service.

I am an electrical engineer with BSEE and MSEE degrees from the University of Pennsylvania and Drexel University, respectively, and am employed full time in the design of control systems for the transportation industry. I am coinventor of US Patent 5,358,202. I am also an amateur radio operator, first licensed by the Commission in 1967, and currently hold an Amateur Extra class license. My interest in amateur radio at an early age led me to pursue a career in electrical engineering.

I oppose the changes proposed by “No-Code International (NCI) in RM-10786. There is no need to eliminate the code test for licenses in the amateur radio service.

The petitioners cite a number of historical reasons for the existence of Morse Code test in the Amateur Radio service, but they do not accurately describe the use of Morse Code in the Amateur Service, past or present. Morse Code is the second most popular mode used by amateurs on the bands below 30 MHz, second only to single sideband voice communication.

While the use of Morse Code has essentially disappeared in other radio services, the mode is widely used by radio amateurs for a variety of purposes, particularly on the HF and MF amateur bands. Since an amateur radio license authorizes its holder to operate only in the amateur radio bands, it is only logical that amateur license requirements be based primarily on what modes and technologies amateurs actually use on the air, and only secondarily on what modes and technologies other services use. Therefore, the argument that the decline of Morse code use by other services should result in elimination of any Morse code testing for an amateur radio license is faulty.

The Amateur service is different from other radio services in several ways, such as its noncommercial nature. Its most unique feature, however, is that amateur radio is about radio for its own sake, rather than as a means to an end. Unlike other services, operating

skill and technical know-how are fundamental qualities of the radio amateur. Other radio services have long focused on eliminating the need for operator skill and technical competence because those services, unlike amateur radio, are not fundamentally concerned with radio as an end in itself.

The petitioners claim that the FCC raised the Morse code test speed in 1936 for “the covert objective...to control the number and growth of voice operators in the amateur service, to curb perceived ‘overcrowding’ of the amateur bands”. This is a misinterpretation of a change made 67 years ago, when conditions in the amateur service were very different from today. The petitioners fail to mention that:

- the written examinations were also significantly changed at the same time
- crowding in the amateur bands was a severe problem
- the technical quality of amateur signals, particularly voice signals, at the time was a major concern
- the amateur service of the 1930s was experiencing a very high turnover in operators, approaching 40% per year
- there was nothing “covert” about the reasons for the license test changes.

In any event, the Commission not only saw the need to raise the code speed from 10 to 13 words per minute in 1936, but also institute a 20 word per minute code test in 1951. The 20 word per minute code test did not have a major impact on US amateurs until 1968, however.

The petitioners make several unsubstantiated and faulty claims about the use of Morse Code in emergency situations. The simple fact is that Morse Code is occasionally used in emergency situations by amateurs. Whether such occasional use is a significant reason for Morse Code testing is simply a matter of opinion.

The petitioners claim that the Morse Code test acts as a “barrier” to keep “otherwise qualified persons” out of the Amateur Radio service. The Morse Code test is cited as a cause of reduced growth, and filtering out technically qualified persons.

The past 23 years of US amateur radio history tell a different story, however. Growth in US amateur radio from 1980 to 1990 was virtually identical to that from 1990 to 2000, even though in the former period of time all US amateur licenses required a code test, and there were no medical waivers. The 1990-2000 period saw a surge of growth when the rules were changed, then regression to about the same level of growth that existed before the changes.

In a similar manner, the reduction of both written and code license test requirements in 2000 resulted in a surge of upgrades, which has tapered down to levels not much different than before the changes. The total number of US amateurs has only grown by about 10,000 in the 41 months since those rules changes took effect, and most of that growth took place soon after the rules changes. Upgrades of existing amateur licenses have displayed a similar pattern. It is only logical to conclude that if the code tests were a

genuine impediment, growth in both total licenses and upgrades would have demonstrated a sustained, dramatic increase. But such sustained increases have not occurred.

In similar manner, the removal of the Morse Code test from the Technician class license has not resulted in a technical revolution in amateur radio from newly-licensed “technically qualified” amateurs. Instead, the continued progress in amateur technical efforts continues to be mostly the result of work done by experienced amateurs, even though the Technician class license has not had a code test for more than 12 years.

The petitioners claim that Morse Code testing is at odds with the purpose of the amateur radio service as a fundamentally technical service. But in the practical experience of thousands of amateurs, the opposite is true.

Skill in Morse Code, even at a very basic level, permits amateurs to use radio equipment ranging from very simple to highly advanced designs, and technologies of almost any vintage. Morse Code skill encourages amateurs to actually build their own radio equipment by offering an easy first step, and a growth path that leads to almost any usable technology. It must be remembered that most radio amateurs are self-trained and do not have access to professional level resources. Few amateurs today would consider a single-sideband transceiver as a first project, but the home construction of Morse Code equipment is possible for almost all amateurs.

I speak from direct experience in amateur radio home construction, having built my first amateur station at age 13. Since then I have built many more projects of increasing complexity, and much of my current amateur radio station is entirely homemade. The construction of my early stations led me to an electrical engineering degree and career. A major factor in that path was being able to start out with very simple but highly effective projects such as a simple Morse Code receiver and transmitter.

Some claim that the Morse Code test acts as some sort of “filter” that produces “quality operators”. Others claim that the Morse Code test has no such effect. It is obvious that no test can absolutely guarantee that a licensee will be a “quality operator”. However, a review of the Commission’s enforcement actions shows that amateurs cited for rules violations are overwhelmingly using voice modes when the cited violations are committed. By contrast, enforcement actions against amateurs using Morse Code are extremely rare. The difference cannot be explained by the relative use of the various modes. In at least one case, the Commission modified the license privileges of an amateur as the result of an enforcement action so that he was only authorized to use Morse Code on the HF bands.

The petitioners ask that the Commission eliminate the remaining 5 word per minute Morse Code test as quickly as possible, without further review, comment or debate. They seek to shortcut the Commission’s administrative procedures such as opposing petitions and a full Notice of Proposed Rule Making, in order to avoid a frank, open discussion of the issue by all interested parties before the Commission. Such shortcutting is simply not

in the best interest of the Amateur Radio service, and should not be granted by the Commission.

Conclusion

While the Morse Code test is no longer required by international treaty, it continues to serve several useful purposes in the qualifications for an Amateur Service license. I urge the Commission to dismiss petition RM-10786 without further action.

Respectfully submitted,

James P. Miccolis